Apple IIGS Game Port Information

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Revised:        8/4/89
Security:       Everyone
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This article last reviewed: 23 June 1989

Some questions have been raised as to whether one should attach a
third-party device to the Apple IIGS game port that directly supplies +5
volts to the port and does not have a resistor for limiting voltage to the
port. People fear that additional voltage without a resistor might short
the logic board.

The truth is that even if the third-party device is actually shorting the
logic board, it would not necessarily be caused by the lack of a
current-limiting resistor.

Applying +5V through the device to the game port is not a problem, because
the game port has +5V on it already. However, because the inputs from the
game port go directly to a TTL device, voltages greater than +5V should not
be applied to the port.

Joysticks and game paddles have a 270-ohm resistor connected from ground to
the "Normally Open" side of the pushbutton switch. The "Normally Closed"
side of the switch goes back to the game port, then to the logic board, and
also to Signal Ground. This resistor limits the amount of current drawn
from the power supply by closing the switch. It does not limit the current
going back to the game port.

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Tech Info Library Article Number:4019